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HANDY  
GENERAL EARTHWORK  
TABLES.

By J. H. WATSON BUCK, M. Inst. C.E.

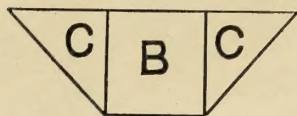
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## 100 FEET CHAIN.



Column **A** contains the Depths of Cutting or Heights of Embankment.

„ B „ Cubical Content of the Central Part, one foot in width, for 100 feet in length.

CC " " " Two slopes  $\frac{1}{4}$  to 1, " " " "

To find the total content of Cutting or Embankment 100 feet in length; multiply **B** by the width of formation in feet; multiply **CC** by the proper multiplier given below; add together the two results.

MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.		
	One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.
$\frac{1}{4}$ to 1	0'5	1	$\frac{1}{4}$ to 1	2	4	$\frac{1}{4}$ to 1	3'5	7	$\frac{1}{4}$ to 1	5	10	$\frac{1}{4}$ to 1	0'25	0'5	$\frac{1}{4}$ to 1	1'75	3'5	$\frac{1}{4}$ to 1	3'25	6'5	$\frac{1}{4}$ to 1	4'75	9'5
$\frac{1}{2}$ to 1	1	2	$\frac{1}{2}$ to 1	2'5	5	$\frac{1}{2}$ to 1	4	8	$\frac{1}{2}$ to 1	5'5	11	$\frac{1}{2}$ to 1	0'75	1'5	$\frac{1}{2}$ to 1	2'25	4'5	$\frac{1}{2}$ to 1	3'75	7'5	$\frac{1}{2}$ to 1	5'25	10'5
$\frac{3}{4}$ to 1	1'5	3	$\frac{3}{4}$ to 1	3	6	$\frac{3}{4}$ to 1	4'5	9	$\frac{3}{4}$ to 1	6	12	$\frac{3}{4}$ to 1	1'25	2'5	$\frac{3}{4}$ to 1	2'75	5'5	$\frac{3}{4}$ to 1	4'25	8'5	$\frac{3}{4}$ to 1	5'75	11'5

&c., &c.

&c., &c.

A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC
Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.
0'00	0'00	0'00	9'00	33'33	75'0	18'00	66'66	300'0	27'00	100'00	675'0	36'00	133'33	1200'0	45'00	166'66	1875'0	54'00	200'00	2700'0	63'00	233'33	3675'0	72'00	266'66	4800'0
'25	0'92	0'06	'25	34'26	79'2	'25	67'59	308'3	'25	100'92	687'4	'25	134'26	1216'7	'25	167'59	1895'9	'25	200'92	2725'0	'25	234'26	3704'2	'25	267'59	4833'1
'50	1'85	0'23	'50	35'18	83'4	'50	68'51	316'8	'50	101'85	700'3	'50	135'18	1233'5	'50	168'51	1916'8	'50	201'85	2750'1	'50	235'18	3733'5	'50	268'51	4866'0
'75	2'77	0'51	'75	36'11	88'0	'75	69'44	325'4	'75	102'76	712'9	'75	136'11	1250'5	'75	169'44	1938'0	'75	202'77	2775'5	'75	236'11	3762'9	'75	269'44	4900'4
1'00	3'69	0'92	10'00	37'03	92'5	19'00	70'36	334'2	28'00	103'70	725'9	37'00	137'03	1267'6	46'00	170'36	1959'1	55'00	203'69	2800'9	64'00	237'03	3792'4	73'00	270'36	4934'1
'25	4'62	1'45	'25	37'95	97'2	'25	71'29	343'2	'25	104'62	738'8	'25	137'95	1284'7	'25	171'29	1980'6	'25	204'62	2826'4	'25	237'95	3822'1	'25	271'29	4968'0
'50	5'55	2'08	'50	38'88	102'1	'50	72'21	352'1	'50	105'54	752'1	'50	138'88	1302'1	'50	172'21	2002'1	'50	205'54	2852'0	'50	238'88	3852'0	'50	272'22	5002'0
'75	6'47	2'83	'75	39'80	106'9	'75	73'14	361'2	'75	106'47	765'2	'75	139'80	1319'5	'75	173'14	2023'6	'75	206'47	2877'7	'75	239'80	3882'0	'75	273'14	5036'1
2'00	7'41	3'69	11'00	40'73	112'1	20'00	74'08	370'3	29'00	107'41	778'8	38'00	140'74	1337'1	47'00	174'06	2045'4	56'00	207'40	2903'7	65'00	240'74	3912'0	74'00	274'06	5070'3
'25	8'33	4'68	'25	41'66	117'1	'25	75'00	379'5	'25	108'33	791'9	'25	141'66	1354'7	'25	174'98	2067'1	'25	208'32	2929'7	'25	241'66	3942'1	'25	274'98	5104'5
'50	9'26	5'79	'50	42'57	122'4	'50	75'92	389'0	'50	109'26	805'7	'50	142'59	1372'4	'50	175'92	2089'1	'50	209'26	2955'7	'50	242'57	3972'4	'50	275'92	5139'1
'75	10'18	6'98	'75	43'50	127'8	'75	76'85	398'6	'75	110'18	819'4	'75	143'51	1390'3	'75	176'85	2111'0	'75	210'17	2982'0	'75	243'50	4002'7	'75	276'85	5173'6
3'00	11'11	8'32	12'00	44'44	133'3	21'00	77'77	408'3	30'00	111'11	833'2	39'00	144'44	1408'3	48'00	177'77	2133'3	57'00	211'10	3008'0	66'00	244'44	4033'4	75'00	277'77	5208'2
'25	12'03	9'77	'25	45'36	138'9	'25	78'69	418'0	'25	112'03	847'1	'25	145'36	1426'4	'25	178'70	2155'6	'25	212'03	3034'7	'25	245'36	4063'8	'25	278'69	5246'1
'50	12'94	11'33	'50	46'29	144'6	'50	79'62	428'0	'50	112'95	861'4	'50	146'29	1444'7	'50	179'62	2177'9	'50	212'96	3061'2	'50	246'29	4094'5	'50	279'62	5277'8
'75	13'88	13'01	'75	47'21	150'4	'75	80'55	438'0	'75	113'88	875'3	'75	147'21	1463'0	'75	180'55	2200'4	'75	213'88	3087'9	'75	247'21	4125'4	'75	280'54	5312'8
4'00	14'80	14'82	13'00	48'14	156'5	22'00	81'48	448'1	31'00	114'80	889'8	40'00	148'14	1481'4	49'00	181'47	2223'0	58'00	214'81	3114'7	67'00	248'14	4156'4	76'00	281'48	5348'0
'25	15'73	16'66	'25	49'06	162'8	'25	82'39	458'3	'25	115'74	904'2	'25	149'06	1500'0	'25	182'39	2245'9	'25	215'72	3141'7	'25	249'06	4187'4	'25	282'39	5383'3
'50	16'66	18'7	'50	50'00	168'6	'50	83'33	468'8	'50	116'66	918'8	'50	150'00	1518'6	'50	183'33	2268'6	'50	216'66	3168'6	'50	250'00	4218'6	'50	283'33	5418'6
'75	17'59	20'9	'75	50'91	175'0	'75	84'24	479'1	'75	117'58	933'2	'75	150'91	1537'6	'75	184'24	2291'6	'75	217'58	3195'7	'75	250'91	4250'0	'75	284'24	5454'1
5'00	18'52	23'1	14'00	51'85	181'5	23'00	85'18	489'8	32'00	118'51	948'2	41'00	151'85	1556'4	50'00	185'18	2314'8	59'00	218'51	3223'0	68'00	251'85	4281'4	77'00	285'18	5489'7
'25	19'44	25'4	'25	52'77	188'0	'25	86'11	500'4	'25	119'44	962'9	'25	152'77	1575'5	'25	186'11	2338'0	'25	219'44	3250'4	'25	252'77	4312'9	'25	286'11	5525'5
'50	20'36	28'0	'50	53'70	194'7	'50	87'03	511'4	'50	120'36	978'0	'50	153'69	1594'5	'50	187'03	2361'3	'50	220'36	3277'9	'50	253'69	4344'5	'50	287'03	5561'2
'75	21'29	30'6	'75	54'62	201'4	'75	87'95	522'1	'75	121'29	992'9	'75	154'62	1613'9	'75	187'95	2384'8	'75	221'29	3305'6	'75	254'62	4376'4	'75	287'96	5597'1
6'00	22'21	33'3	15'00	55'55	208'0	24'00	88'88	533'3	33'00	122'23	1008'3	42'00	155'54	1633'7	51'00	188'88	2408'3	60'00	222'21	3333'3	69'00	255'55	4408'3	78'00	288'88	5633'3
'25	23'14	36'2	'25	56'47	215'3	'25	89'80	544'4	'25	123'14	1023'6	'25	156'47	1652'3	'25	189'81	2431'9	'25	223'14	3361'1	'25	256'47	4440'3	'25	289'80	5669'4
'50	24'06	39'0	'50	57'39	222'4	'50	90'73	555'7	'50	124'06	1038'9	'50	157'39	1672'4	'50	190'73	2455'7	'50	224'06	3389'1	'50	257'39	4472'4	'50	290'73	5705'6
'75	24'98	42'2	'75	58'32	229'4	'75	91'65	567'1	'75	124'98	1054'7	'75	158'32	1692'1	'75	191'65	2479'7	'75	224'98	3417'1	'75	258'32	4504'5	'75	291'65	5742'1
7'00	25'92	45'3	16'00	59'26	236'9	25'00	92'59	578'6	34'00	125'92	1070'4	43'00	159'26	1712'1	52'00	192'59	2503'8	61'00	225'92	3445'4	70'00	259'26	4537'0	79'00	292'59	5778'8
'25	26'85	48'6	'25	60'18	244'5	'25	93'51	590'3	'25	126'85	1086'1	'25	160'18	1731'9	'25	193'52	2527'7	'25	226'85	3473'6	'25	260'18	4569'4	'25	293'51	5815'2
'50	27'77	52'1	'50	61'11	252'1	'50	94'44	602'1	'50	127'77	1102'1	'50	161'09	1752'1	'50	194'44	2551'9	'50	227'77	3502'0	'50	261'11	4602'0	'50	294'44	5852'0
'75	28'69	55'6	'75	62'03	259'7	'75	95'36	613'8	'75	128'70	1118'0	'75	162'04	1772'3	'75	195'36	2576'3	'75	228'69	3530'6	'75	262'03	4634'7	'75	295'33	5888'8
8'00	29'62	59'2	17'00	62'97	267'6	26'00	96'29	625'7	35'00	129'62	1134'2	44'00	162'95	1792'4	53'00	196'29	2600'8	62'00	229'62	3559'1	71'00	262'95	4667'4	80'00	296'29	5925'9
'25	30'54	63'0	'25	63'89	275'6	'25	97'21	637'9	'25	130'55	1150'4	'25	163'88	1813'0	'25	197'21	2625'4	'25	230'54	3587'9	'25	263'88	4700'4	'25	297'21	5957'8
'50	31'46	66'8	'50	64'82	283'5	'50	98'14	650'1	'50	131'47	1166'8	'50	164'80	1833'5	'50	198'13	2650'1	'50	231'47	3616'8	'50	264'80	4733'3	'50	298'14	5985'3
'75	32'39	70'9	'75	65'74	291'6	'75	99'06	662'4	'75	132'39	1183'3	'75	165'74	1854'2	'75	199'06	2675'0	'75	232'39	3645'8	'75	265'73	4766'7	'75	299'06	6000'3

To find the cubical content of a Cutting or Embankment of any length, add together the figures in Columns **B** corresponding to the depths of the Cutting or heights of the Embankment for each 100 ft. length, with the proportions due to fractions of 100 ft. as given below, and multiply their sum by the width of formation in feet. Adopt the same course with regard to Columns **CC**, multiplying the sum by the proper multiplier for the slope or slopes. Add together the two results. If the two slopes differ in inclination, the figures for each must be added separately, and each sum multiplied by its own multiplier, the two results being then added to that obtained from Column **B**.

For portions less than 100 ft. in length, the result requires modifying as follows:—Move the decimal point two figures to the left, and multiply by the length in feet.

NOTE.—In sidelong ground, a horizontal equating line must be drawn to give the height.

N. B.—The table can be used for compound slopes.

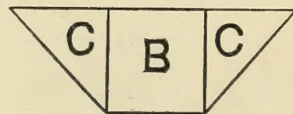
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# HANDY GENERAL

BY J. H. WATSON

## 66 FEET CHAIN.



Column **A** contains the Depths of Cutting or Heights of Embankment.

„ B „ Cubical Content of the Central Part, one foot in width for one Chain in length (66 feet).

„ CC „ „ „ Two slopes  $\frac{1}{4}$  to 1, „ „ „ „ „

To find the total content of Cutting or Embankment one chain in length; multiply **B** by the width of formation in feet; multiply **CC** by the proper multiplier given below; add together the two results.

MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.		
	One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.
1 to 1	0'5	1	1 to 1	2	4	1 to 1	3'5	7	1 to 1	5	10	1 to 1	0'25	0'5	1 to 1	1'75	3'5	1 to 1	3'25	6'5	1 to 1	4'75	9'5
2 to 1	1	2	1 to 1	2'5	5	2 to 1	4	8	2 to 1	5'5	11	2 to 1	0'75	1'5	1 to 1	2'25	4'5	2 to 1	3'75	7'5	2 to 1	5'25	10'5
3 to 1	1'5	3	1 to 1	3	6	2 to 1	4'5	9	3 to 1	6	12	3 to 1	1'25	2'5	1 to 1	2'75	5'5	3 to 1	4'25	8'5	3 to 1	5'75	11'5

&c., &c.

A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC
Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.
0'00	0'00	0'00	9'00	22'00	49'5	18'00	44'00	198'0	27'00	66'00	445'5	36'00	88'00	792'0	45'00	110'00	1237'5	54'00	132'00	1782'0	63'00	154'00	2425'5	72'00	176'00	3168'8
'25	0'61	0'04	'25	22'61	52'3	'25	44'61	203'5	'25	66'61	453'7	'25	88'61	803'0	'25	110'61	1251'3	'25	132'61	1798'5	'25	154'61	2444'8	'25	176'61	3190'8
'50	1'22	0'15	'50	23'22	55'1	'50	45'22	209'1	'50	67'22	462'2	'50	89'22	814'1	'50	111'22	1265'1	'50	133'22	1815'1	'50	155'22	2464'1	'50	177'22	3212'1
'75	1'83	0'34	'75	23'83	58'1	'75	45'83	214'8	'75	67'83	470'5	'75	89'83	825'3	'75	111'83	1279'1	'75	133'83	1831'8	'75	155'83	2483'1	'75	177'83	3234'1
1'00	2'44	0'61	10'00	24'44	61'1	19'00	46'44	226'6	28'00	68'44	479'1	37'00	90'44	836'6	46'00	112'44	1293'0	55'00	134'44	1848'6	64'00	156'44	2503'0	73'00	178'44	3256'6
'25	3'05	0'96	'25	25'05	64'2	'25	47'05	220'5	'25	69'05	487'6	'25	91'05	847'9	'25	113'05	1307'2	'25	135'05	1865'4	'25	157'05	2522'6	'25	179'05	3278'8
'50	3'66	1'37	'50	25'66	67'4	'50	47'66	232'4	'50	69'66	496'4	'50	91'66	859'4	'50	113'66	1321'3	'50	135'66	1882'3	'50	157'66	2542'3	'50	179'66	3301'1
'75	4'27	1'87	'75	26'27	70'6	'75	48'27	238'4	'75	70'27	505'0	'75	92'27	870'9	'75	114'27	1335'6	'75	136'27	1899'3	'75	158'27	2562'1	'75	180'27	3323'1
2'00	4'89	2'44	11'00	26'88	74'0	20'00	48'89	244'4	29'00	70'89	514'0	38'00	92'89	882'5	47'00	114'88	1350'0	56'00	136'89	1916'4	65'00	158'89	2581'9	74'00	180'88	3346'0
'25	5'50	3'09	'25	27'50	77'3	'25	49'50	250'5	'25	71'50	522'7	'25	93'50	894'1	'25	115'50	1364'3	'25	137'50	1933'6	'25	159'50	2601'8	'25	181'50	3369'6
'50	6'11	3'82	'50	28'11	80'8	'50	50'11	256'8	'50	72'11	531'8	'50	94'11	905'8	'50	116'11	1378'8	'50	138'11	1950'8	'50	160'11	2621'8	'50	182'11	3391'1
'75	6'72	4'61	'75	28'71	84'4	'75	50'72	263'1	'75	72'72	540'8	'75	94'72	917'6	'75	116'72	1393'3	'75	138'71	1968'1	'75	160'71	2641'8	'75	182'72	3414'1
3'00	7'33	5'49	12'00	29'33	88'0	21'00	51'33	269'5	30'00	73'33	549'9	39'00	95'33	929'5	48'00	117'33	1408'0	57'00	139'33	1985'5	66'00	161'33	2662'0	75'00	183'33	3437'1
'25	7'94	6'45	'25	29'94	91'7	'25	51'94	275'9	'25	73'94	559'1	'25	95'94	941'4	'25	117'94	1422'7	'25	139'94	2002'9	'25	161'94	2682'1	'25	183'94	3462'1
'50	8'54	7'48	'50	30'55	95'5	'50	52'55	282'5	'50	74'55	568'5	'50	96'55	953'5	'50	118'55	1437'4	'50	140'55	2020'4	'50	162'55	2702'4	'50	184'55	3483'3
'75	9'16	8'59	'75	31'16	99'3	'75	53'16	289'1	'75	75'16	577'7	'75	97'16	965'6	'75	119'16	1452'3	'75	141'16	2038'0	'75	163'16	2722'8	'75	185'16	3506'6
4'00	9'77	9'78	13'00	31'77	103'3	22'00	53'78	295'8	31'00	75'77	587'3	40'00	97'77	977'7	49'00	119'77	1467'2	58'00	141'78	2055'7	67'00	163'77	2743'2	76'00	185'77	3529'2
'25	10'38	11'00	'25	32'38	107'3	'25	54'38	302'5	'25	76'38	596'7	'25	98'38	990'0	'25	120'38	1482'3	'25	142'38	2073'5	'25	164'38	2763'7	'25	186'38	3553'3
'50	11'00	12'4	'50	33'00	111'4	'50	55'00	309'4	'50	77'00	606'4	'50	99'00	1002'3	'50	121'00	1497'3	'50	143'00	2091'3	'50	165'00	2784'3	'50	187'00	3576'6
'75	11'61	13'8	'75	33'60	115'5	'75	55'60	316'2	'75	77'60	615'9	'75	99'60	1014'8	'75	121'60	1512'5	'75	143'60	2109'2	'75	165'60	2805'0	'75	187'60	3599'7
5'00	12'22	15'3	14'00	34'22	119'8	23'00	56'22	323'3	32'00	78'22	625'8	41'00	100'22	1027'2	50'00	122'22	1527'8	59'00	144'22	2127'2	68'00	166'22	2825'7	77'00	188'22	3623'3
'25	12'83	16'8	'25	34'83	124'1	'25	56'83	330'3	'25	78'83	635'5	'25	100'83	1039'8	'25	122'83	1543'1	'25	144'83	2145'3	'25	166'83	2846'5	'25	188'83	3646'8
'50	13'44	18'5	'50	35'44	128'5	'50	57'44	337'5	'50	79'44	645'5	'50	101'44	1052'4	'50	123'44	1558'5	'50	145'44	2163'4	'50	167'44	2867'4	'50	189'44	3670'4
'75	14'05	20'2	'75	36'05	132'9	'75	58'05	344'6	'75	80'05	655'3	'75	102'05	1065'2	'75	124'05	1574'0	'75	146'05	2181'7	'75	168'05	2888'4	'75	190'05	3694'1
6'00	14'66	22'0	15'00	36'66	137'5	24'00	58'66	352'0	33'00	80'67	665'5	42'00	102'66	1078'0	51'00	124'66	1589'5	60'00	146'66	2200'0	69'00	168'66	2909'5	78'00	190'66	3718'0
'25	15'27	23'9	'25	37'27	142'1	'25	59'27	359'8	'25	81'27	675'6	'25	103'27	1090'8	'25	125'27	1605'1	'25	147'27	2218'3	'25	169'27	2930'6	'25	191'27	3741'8
'50	15'88	25'8	'50	37'88	146'8	'50	59'88	366'8	'50	81'88	685'7	'50	103'88	1103'8	'50	125'88	1620'8	'50	147'88	2236'8	'50	169'88	2951'8	'50	191'88	3765'7
'75	16'49	27'9	'75	38'49	151'6	'75	60'49	374'3	'75	82'49	696'1	'75	104'49	1116'8	'75	126'49	1636'6	'75	148'49	2255'3	'75	170'49	2973'4	'75	192'49	3789'8
7'00	17'11	29'9	16'00	39'11	156'4	25'00	61'11	381'9	34'00	83'11	706'5	43'00	105'11	1136'0	52'00	127'11	1652'5	61'00	149'11	2274'0	70'00	171'11	2993'4	79'00	193'11	3814'0
'25	17'72	32'1	'25	39'72	161'4	'25	61'72	389'6	'25	83'72	716'8	'25	105'72	1143'1	'25	127'72	1668'3	'25	149'72	2292'0	'25	171'72	3015'8	'25	193'72	3838'8
'50	18'33	34'4	'50	40'33	166'4	'50	62'33	397'4	'50	84'33	727'4	'50	106'32	1156'4	'50	128'33	1684'3	'50	150'33	2311'3	'50	172'33	3037'3	'50	194'33	3862'3
'75	18'94	36'7	'75	40'94	171'4	'75	62'94	405'1	'75	84'94	737'9	'75	106'94	1169'7	'75	128'94	1700'4	'75	150'94	2330'2	'75	172'94	3058'9	'75	194'94	3886'6
8'00	19'55	39'1	17'00	41'56	176'6	26'00	63'55	413'0	35'00	85'55	748'6	44'00	107'55	1183'0	53'00	129'55	1716'5	62'00	151'55	2349'0	71'00	173'55	3080'5	80'00	195'55	3911'0
'25	20'16	41'6	'25	42'17	181'9	'25	64'16	421'0	'25	86'16	759'3	'25	108'16	1196'6	'25	130'16	1732'8	'25	152'16	2368'0	'25	174'16	3102'3	'25	196'16	3936'6
'50	20'77	44'1	'50	42'78	187'1	'50	64'77	429'1	'50	86'77	770'1	'50	108'77	1210'1	'50	130'77	1749'1	'50	152'77	2387'1	'50	174'77	3124'0	'50	196'77	3958'6
'75	21'38	46'8	'75	43'39	192'5	'75	65'38	437'2	'75	87'38	781'0	'75	109'38	1223'8	'75	131'38	1765'5	'75	153'38	2406'2	'75	175'38	3146'0	'75	197'38	3980'6

To find the cubical content of a Cutting or Embankment of any length, add together the figures in Columns **B** corresponding to the depths of the Cutting or heights of the Embankment for each chain length, with the proportions due to fractions of a chain, as given below, and multiply their sum by the width of formation in feet. Adopt the same course with regard to Columns **CC**, multiplying the sum by the proper multiplier for the slope or slopes. Add together the two results. If the two slopes differ in inclination, the figures for each must be added separately, and each sum multiplied by its own multiplier, the two results being then added to that obtained from Column **B**.

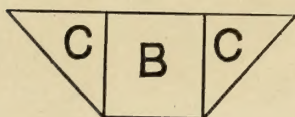
For portions less than 66 ft. in length, the result requires modifying as follows:—Move the decimal point two figures to the left, and multiply by the length in links.

NOTE.—In sidelong ground, a horizontal equating line must be drawn to give the height.

N.B.—The table can be used for compound slopes.



100 FEET CHAIN.



Column **A** contains the Depths of Cutting or Heights of Embankment.

„ B „ Cubical Content of the Central Part, one foot in width, for 100 feet in length.

" CC " " " Two slopes  $\frac{1}{4}$  to 1, " " " "

To find the total content of Cutting or Embankment 100 feet in length; multiply **B** by the width of formation in feet; multiply **CC** by the proper multiplier given below; add together the two results.

MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.			MULTIPLIERS.		
	One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.		One Slope.	Two Slopes.
$\frac{1}{2}$ to I	0·5	1	I to I	2	4	$1\frac{1}{2}$ to I	3·5	7	$2\frac{1}{2}$ to I	5	10	$\frac{1}{2}$ to I	0·25	0·5	$\frac{1}{2}$ to I	1·75	3·5	$1\frac{1}{2}$ to I	3·25	6·5
$\frac{1}{2}$ to I	1	2	$1\frac{1}{4}$ to I	2·5	5	2 to I	4	8	$2\frac{1}{2}$ to I	5·5	11	$\frac{1}{2}$ to I	0·75	1·5	$\frac{1}{2}$ to I	2·25	4·5	$1\frac{1}{2}$ to I	3·75	7·5
$\frac{1}{2}$ to I	1·5	3	$1\frac{1}{2}$ to I	3	6	$2\frac{1}{4}$ to I	4·5	9	3 to I	6	12	$\frac{1}{2}$ to I	1·25	2·5	$\frac{1}{2}$ to I	2·75	5·5	$2\frac{1}{8}$ to I	4·25	8·5

&c., &c.

&c., &c.

A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC	A	B	CC
Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.	Ft.	Cubic Yards.	Cubic Yards.
0'00	0'00	0'00	9'00	33'33	75'0	18'00	66'66	300'0	27'00	100'00	675'0	36'00	133'33	1200'0	45'00	166'66	1875'0	54'00	200'00	2700'0	63'00	233'33	3675'0
'25	0'02	0'06	'25	34'26	79'2	'25	67'59	308'3	'25	100'92	687'4	'25	134'26	1216'7	'25	167'59	1895'9	'25	200'92	2725'0	'25	234'26	3704'2
'50	1'85	0'23	'50	35'18	83'4	'50	68'51	316'8	'50	101'86	700'3	'50	135'18	1233'5	'50	168'51	1916'8	'50	201'85	2750'1	'50	235'18	3733'5
'75	2'77	0'51	'75	36'11	88'0	'75	69'44	325'4	'75	102'76	712'9	'75	136'11	1250'5	'75	169'44	1938'0	'75	202'77	2775'5	'75	236'11	3762'9
1'00	3'69	0'92	10'00	37'03	92'5	19'00	70'36	334'2	28'00	103'70	725'9	37'00	137'03	1267'6	46'00	170'36	1959'1	55'00	203'69	2800'9	64'00	237'03	3792'4
'25	4'62	1'45	'25	37'95	97'2	'25	71'29	343'2	'25	104'62	738'8	'25	137'95	1284'7	'25	171'29	1980'6	'25	204'62	2826'4	'25	237'95	3822'1
'50	5'55	2'08	'50	38'88	102'1	'50	72'21	352'1	'50	105'54	752'1	'50	138'88	1302'1	'50	172'21	2002'1	'50	205'54	2852'0	'50	238'88	3852'0
'75	6'47	2'83	'75	39'80	106'9	'75	73'14	361'2	'75	106'47	765'2	'75	139'80	1319'5	'75	173'14	2023'6	'75	206'47	2877'7	'75	239'80	3882'0
2'00	7'41	3'69	11'00	40'73	112'1	20'00	74'08	370'3	29'00	107'41	778'8	38'00	140'74	1337'1	47'00	174'06	2045'4	56'00	207'40	2903'7	65'00	240'74	3912'0
'25	8'33	4'68	'25	41'66	117'1	'25	75'00	379'5	'25	108'33	791'9	'25	141'66	1354'7	'25	174'98	2067'1	'25	208'32	2929'7	'25	241'66	3942'1
'50	9'26	5'79	'50	42'57	122'4	'50	75'92	389'0	'50	109'26	805'7	'50	142'59	1372'4	'50	175'92	2089'1	'50	209'26	2955'7	'50	242'57	3972'4
'75	10'18	6'98	'75	43'50	127'8	'75	76'85	398'6	'75	110'18	819'4	'75	143'51	1390'3	'75	176'85	2111'0	'75	210'17	2982'0	'75	243'50	4002'7
3'00	11'11	8'32	12'00	44'44	133'3	21'00	77'77	408'3	30'00	111'11	833'2	39'00	144'44	1408'3	48'00	177'77	2133'3	57'00	211'10	3008'0	66'00	244'44	4033'4
'25	12'03	9'77	'25	45'36	138'9	'25	78'69	418'0	'25	112'03	847'1	'25	145'36	1426'3	'25	178'70	2155'6	'25	212'03	3034'7	'25	245'36	4063'8
'50	12'94	11'33	'50	46'29	144'6	'50	79'62	428'0	'50	112'95	861'4	'50	146'29	1444'7	'50	179'62	2177'9	'50	212'96	3061'2	'50	246'29	4094'5
'75	13'88	13'01	'75	47'21	150'4	'75	80'55	438'0	'75	113'88	875'3	'75	147'21	1463'7	'75	180'55	2200'4	'75	213'88	3087'9	'75	247'21	4125'4
4'00	14'80	14'82	13'00	48'14	156'5	22'00	81'48	448'1	31'00	114'80	889'8	40'00	148'14	1481'4	49'00	181'47	2220'3	58'00	214'81	3114'7	67'00	248'14	4156'4
'25	15'73	16'66	'25	49'06	162'6	'25	82'39	458'3	'25	115'74	904'2	'25	149'06	1500'0	'25	182'39	2245'9	'25	215'72	3141'7	'25	249'06	4187'4
'50	16'66	18'7	'50	50'00	168'8	'50	83'33	468'8	'50	116'66	918'8	'50	150'00	1518'6	'50	183'33	2268'6	'50	216'66	3168'6	'50	250'00	4218'6
'75	17'59	20'9	'75	50'91	175'0	'75	84'24	479'1	'75	117'58	933'2	'75	150'91	1537'6	'75	184'24	2291'6	'75	217'58	3195'7	'75	250'91	4250'0
5'00	18'52	23'1	14'00	51'85	181'5	23'00	85'18	489'8	32'00	118'51	948'2	41'00	151'85	1556'4	50'00	185'18	2314'8	59'00	218'51	3223'0	68'00	251'85	4281'4
'25	19'44	25'4	'25	52'77	188'0	'25	86'11	500'4	'25	119'44	962'9	'25	152'77	1575'5	'25	186'11	2338'0	'25	219'44	3250'4	'25	252'77	4312'9
'50	20'36	28'0	'50	53'70	194'7	'50	87'03	511'4	'50	120'36	978'0	'50	153'69	1594'5	'50	187'03	2361'3	'50	220'36	3277'9	'50	253'69	4344'5
'75	21'29	30'6	'75	54'62	201'4	'75	87'95	522'1	'75	121'29	992'9	'75	154'62	1613'9	'75	187'95	2384'8	'75	221'29	3305'6	'75	254'62	4376'4
6'00	22'21	33'3	15'00	55'55	208'4	24'00	88'88	533'3	33'00	122'23	1008'3	42'00	155'54	1633'3	51'00	188'88	2408'3	60'00	222'21	3333'3	69'00	255'55	4408'3
'25	23'14	36'2	'25	56'47	215'3	'25	89'80	544'4	'25	123'14	1023'6	'25	156'47	1652'7	'25	189'81	2431'9	'25	223'14	3361'1	'25	256'47	4440'3
'50	24'06	39'0	'50	57'39	222'4	'50	90'73	555'7	'50	124'06	1038'9	'50	157'39	1672'4	'50	190'73	2455'7	'50	224'06	3389'1	'50	257'39	4472'4
'75	24'98	42'2	'75	58'32	229'7	'75	91'65	567'1	'75	124'98	1054'7	'75	158'32	1692'1	'75	191'65	2479'7	'75	224'98	3417'1	'75	258'32	4504'5
7'00	25'92	45'3	16'00	59'26	236'9	25'00	92'59	578'6	34'00	125'92	1070'4	43'00	159'26	1712'1	52'00	192'59	2503'8	61'00	225'92	3445'4	70'00	259'26	4537'0
'25	26'85	48'6	'25	60'18	244'5	'25	93'51	590'3	'25	126'85	1086'1	'25	160'18	1731'9	'25	193'52	2527'7	'25	226'85	3473'6	'25	260'18	4569'4
'50	27'77	52'1	'50	61'11	252'1	'50	94'44	602'1	'50	127'77	1102'1	'50	161'09	1752'1	'50	194'44	2551'9	'50	227'77	3502'0	'50	261'11	4602'0
'75	28'69	55'6	'75	62'03	259'7	'75	95'36	613'8	'75	128'70	1118'0	'75	162'04	1772'3	'75	195'36	2576'3	'75	228'69	3530'6	'75	262'03	4634'7
8'00	29'62	59'2	17'00	62'97	267'6	26'00	96'29	625'7	35'00	129'62	1134'2	44'00	162'95	1792'4	53'00	196'29	2600'8	62'00	229'62	3559'1	71'00	262'95	4667'4
'25	30'54	63'0	'25	63'89	275'6	'25	97'21	637'9	'25	130'55	1150'4	'25	163'88	1813'0	'25	197'21	2625'4	'25	230'54	3587'9	'25	263'88	4700'4
'50	31'46	66'8	'50	64'82	283'5	'50	98'14	650'1	'50	131'47	1166'8	'50	164'80	1833'5	'50	198'13	2650'1	'50	231'47	3616'8	'50	264'80	4733'3
'75	32'39	70'9	'75	65'74	291'6	'75	99'06	662'4	'75	132'39	1183'3	'75	165'74	1854'2	'75	199'06	2675'0	'75	232'39	3645'8	'75	265'73	4766'7

To find the cubical content of a Cutting or Embankment of any length, add together the figures in Columns **B** corresponding to the depths of the Cutting or heights of the Embankment for each 100 ft. length, with the proportions due to fractions of 100 ft. as given below, and multiply their sum by the width of formation in feet. Adopt the same course with regard to Columns **CC**, multiplying the sum by the proper multiplier for the slope or slopes. Add together the two results. If the two slopes differ in inclination, the figures for each must be added separately, and each sum multiplied by its own multiplier, the two results being then added to that obtained from Column **B**.

For portions less than 100 ft. in length, the result requires modifying as follows:—Move the decimal point two figures to the left, and multiply by the length in feet.

NOTE.—In sidelong ground, a horizontal equating line must be drawn to give the height.

N.B.—The table can be used for compound slopes.

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